

An Account of a trip to the Barapede Cave, Talewadi, Belgaum District, Mysore State, with some Notes on Reptiles and Amphibians

BY

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(With one text-figure)

In May 1961, I accompanied Mon. A. Brosset on a short trip to the Barapede Cave at Talewadi (Belgaum District, Mysore State). The main objective was Wroughton's Free-tailed Bat, *Otomops wroughtoni* (Thomas), discovered here by the late Mr. S. H. Prater in 1912 and not recorded since then from anywhere. We took with us two members of the Society's staff, P. W. Soman and M. J. Pereira. The 'long-lost' bats were present in numbers in cracks in the roof of the cave, and specimens were caught in a net thoughtfully brought by M. Brosset all the way from Bombay—a net with a long handle made up of poles which fitted into each other. In the course of the trip, Soman visited a large and extensive group of caves at Krishnapur, some six miles down the valley to the west of Talewadi and close to the Goa border, and collected some bats, including 5 males of *Taphozous theobaldi* Dobson. This species has a wide distribution over Burma, Malaya, and Java, but there is only one previous record of it from India—3 males obtained at Asirgarh, Nimar, Central India, during the Mammal Survey in 1911. M. Brosset is reporting on the bats in the course of a paper dealing with the species met by him during his sojourn of two years in India. I am giving a short account of the other aspects of the trip as readers may find it of interest.

Leaving Bombay by car on the morning of the 19th May, we arrived the same night at the Forest Bungalow at Khanapur (on the road to Karwar) which was to be our headquarters. On the 20th, we drove to Shirolī twenty miles away and proceeded thence by car to Hemadga (4 miles) and then on foot to Talewadi and the Cave on

the top of the Ghat, a distance of another five miles. On the way, at Hemadga, we were joined by Mr. P. L. Menezes, a retired miner, who took a share in our bat-catching and other natural history activities.

Our trip was discussed when M. Brosset first arrived in Bombay, but was finally arranged at short notice. Only a day before we left Bombay, we discovered that Talewadi and the Barapede Cave lay in a Security Area and that special permission was required to visit it. In response to telephonic and telegraphic requests, the Commissioner of the Division very kindly arranged to send a message to Talewadi and left a copy of it with the Forest Department at Belgaum, which we picked up on our way through. On our way to the Cave, we happened to by-pass the hamlet and the police outpost at Talewadi. Coming back from the Cave and nearing Talewadi, we found ourselves being rapidly approached by three armed persons, one of them carrying a Sten gun ready for action, and evidently a police patrol guarding the Goa border. We were a party of seven, carrying two guns and including a European. Conscious how suspicious our appearance and movements must seem and how short a time there had been for the local authorities to be informed about our presence in the area, we tried to look unconcerned and waited for them to come up to us. There were a few tense moments. Fortunately, we were able to satisfy them as to our bona fides and they took us to their camp and entertained us to a very welcome cup of tea.

After the successful catch at the Barapede Cave, Mr. Menezes offered to show us the way to the Krishnapur Caves, about which we had been told at Talewadi. As we had effected our main object, we thought it would be more interesting to visit the Dandeli Game Sanctuary. So the party broke up and Soman stayed over at Hemadga to visit Krishnapur, while the others returned to Khanapur. On the 21st, we drove over hilly and forested country to Dandeli. It was raining most of the time and we arrived to find that the causeway over the river bordering the Sanctuary had been flooded since the morning and would be unusable for the duration of the monsoon! On the way back, we had to make a detour of several miles to go round another impassable causeway. Hurrying to Shirolí in the evening to pick up Soman, we found the road beyond it impassable and returned to Khanapur, leaving him to spend another night at Hemadga. On the 22nd morning, we were back at Shirolí and met Soman, who had had a strenuous but interesting and

successful walk to Krishnapur. We then turned back and, spending a night at Satara, reached Bombay on the 23rd, after making a short stop at Mahableshwar.

On the open plateau at Talewadi, we saw marks of bison which are said to visit this place in some numbers during certain seasons of the year. Beyond these hoof prints, we saw no trace of any game (in which term I am including hare) in all our travelling, some of which was at night. On the Nagargali Ghat, a forest contractor drove past and stopped to chat. A shot-gun rested against his seat, ready for action. There can be little doubt that here, as in Bombay and almost all over the country, most of the larger animals have been killed off by indiscriminate shooting from cars, and by the large number of crop-protection guns.

Of birds, we did not see many. No partridge, junglefowl, or peafowl was seen. A few miles before Belgaum was a raptor's nest high up in a tree, visible from the road. On the return journey, we stopped for a while and the single full-fledged young of the Booted Eagle (*Hieraëetus pennatus*) flapped away from the nest. At the same place, we saw White-eyes (*Zosterops palpebrosa*) and Bay-backed Shrikes (*Lanius vittatus*) building, while Brahminy Mynas (*Sturnus pagodarum*) were seen entering a hole up in a tree. At Khanapur, Red-rumped and Wire-tailed Swallows (*Hirundo daurica erythropygia* and *H. smithii filifera*) were both present. A pair of the former was attending to a nest still unlined and empty under a culvert. A party of 4 adult and 5 young Wire-tailed Swallows were settled on a half-built bridge across the river. The adults perched on steel rods projecting horizontally from the structure, while the young, which flew about, appeared to cling to vertical surfaces only. I did not have the opportunity of watching them long enough to be sure, but it would indeed be interesting if such a difference in perching habits at different ages could be confirmed. Four young of the Pied Bush Chat (*Saxicola caprata*) in the spotted stage were noted. Only the male parent was seen and the small amount of white on the lower surface, restricted to the vent, separated him from the migrant form *bicolor*, but it was not possible to decide whether it was *burmanica* of Baker which breeds at Khandala, or *nilgiriensis* of Whistler described from Ootacamund, Nilgiris.

A pair of Crow-Pheasants (*Centropus sinensis*) attracted attention—one chased the other, hopping along the ground and in short flights, over several hundred yards. One or both, usually the pursuer, had the tail spread out to one-and-half times or twice the normal width.

It was also often held at an absurdly tilted angle. Is this some form of courtship?

During the trip, with Soman's assistance, we secured several frogs and reptiles. In view of the scarcity of information regarding these creatures in India, I am listing them together with such fragmentary notes as we were able to record, and take this opportunity of including notes previously made by me from other places.

LIZARDS

1. *Hemidactylus brooki* Gray :

Under stones in burnt clearings in the forest at Talewadi. A juvenile was seen near two round eggs side by side under a stone. The young are of the same colour as the adult.

As already noted by McCann (*J. Bombay nat. Hist. Soc.* 41: 756-7), this gecko is common near Bombay but is found more often in trees and under stones, its place in the house being taken by *H. flaviviridis* Rüppell, though at Nasik I have seen them in a house under conditions identical with those of the latter.

2. *Hemidactylus prashadi* Smith :

Several were seen on the walls of a forest bungalow at Shirol in the evening. One young, black and strongly marked with white, was also obtained. Two recently hatched eggs close together on the top of a wooden box inside the bungalow were also noted. This appears to be a small extension of the known distribution of this species, which is recorded so far only from Jog (Gersoppa), the type locality.

3. *Hemidactylus frenatus* Dum. & Bib. :

Specimens were obtained on a lamp post in a garden in Belgaum at about 8 p.m., capturing insects attracted by the light. Though recorded from Bengal and eastern Nepal, this appears to be the northernmost known limit of this species in peninsular India¹.

4. *Hemidactylus leschenaulti* Dum. & Bib. :

One taken at Satara Dak Bungalow.

5. *Mabuya carinata* (Schneider) : The Common Skink :

Was seen but not collected.

6. *Riopa guentheri* (Gray) :

Two juveniles and two adults were found under stones in open

¹ I have subsequently obtained this species on a tree at Kihim, Kolaba District, Maharashtra, and found three specimens from Salsette Island, Bombay, in the Society's collections.

country adjoining the forest at Talewadi. This southern species extends northwards to Matheran, Kolaba District (Smith), and we have obtained it at Mahableshwar earlier.

7. **Calotes rouxi** Dum. & Bib. :

On the western slopes towards Krishnapur.

SNAKES

Dryophis nasutus (Lacépède) :

A single specimen of the Green Whip Snake was captured near Talewadi. One taken at Mahableshwar on 2 November 1954 had an entire anal, while another brought in later from the same place by Fr. Norman Fuller had it normal, i.e. divided.

AMPHIBIANS

1. **Rana cyanophlyctis** Schneider :

Common in small pools on open plateau at Talewadi. They call both by day and night and also almost all through the year, though there is no evidence that they breed all the time. Many, including Babar in his MEMOIRS, have referred to its habit of skipping over the surface of the water. It does not however appear to have been noted that the last hop never stops on the surface, but is continued under water, with the frog emerging a short distance away to rest at the surface.

2. **Rana tigerina** Daud. :

Noted at Khanapur and other places. Tadpoles were obtained on the Talewadi plateau in pools as much as a hundred yards from the forest. This species also calls by day and night, but only during the breeding seasons and when seated in the water or on mud or land.

McCann in the course of his excellent Notes on Indian Batracians (*J. Bombay nat. Hist. Soc.* 36 : 158-166) refers to the pale lemon yellow of the adults being apparently due to aestivation. It is, however, strange that this colour should have been noted in males only, implying that females do not react to aestivation in the same manner. On 20 June 1955, I drove into the Krishnagiri Park, near Bombay. The monsoon was late, but it had rained a little. On the way in at about 8 a.m., I noted 2 large yellow frogs seated on the damp bottom of a pond along the road below Gandhi Mandir. There

was yet no water on the surface. When we returned after about 1½ hour, it had been raining all the time and there was quite a lot of water collected in the tank. A large number of yellow *tigerinas* had appeared from somewhere, and were all waiting to jump on to anything that moved. From a distance of about 10 yards, one could hear a low 'gurr' uttered by them.

3. **Rana limnocharis** Wieg. :

Noted between Shirolu and Talewadi. This frog has a loud and distinctive call which is only uttered at night. Tadpoles may be found in shallow monsoon streams and even in rain water flowing over a road. They were also seen in deeper monsoon pools with stagnant water, and in rock-bound cisterns. The breeding season appears to be prolonged, for I have seen large numbers of tiny frogs in a swampy marsh along the edge of a lake not far from Nasik on 26 December 1954. The adult is reluctant to swim.

4. **Rana rufescens** (Jerdon) :

One obtained at Talewadi. This species described from Malabar also extends as far north as Khandala, and at the Kanheri Caves near Bombay on 17 June 1956 a pair was seen in copula in the water of a cistern with vertical walls. Both had orange patches at the back of their fore-arms and on the sides of the neck. On land, its habits are toad-like. The eggs and tadpoles of this frog are yet unknown.

5. **Rana breviceps** Schneider :

A specimen obtained at Satara had only one tubercle on its feet (cf. Bhaduri & Kirpalani, *J. Bombay nat. Hist. Soc.* **52** : 620-623).

6. **Rana beddomii** Gunth. : -

Talewadi.

7. **Rana malabarica** Bib. :

Talewadi.

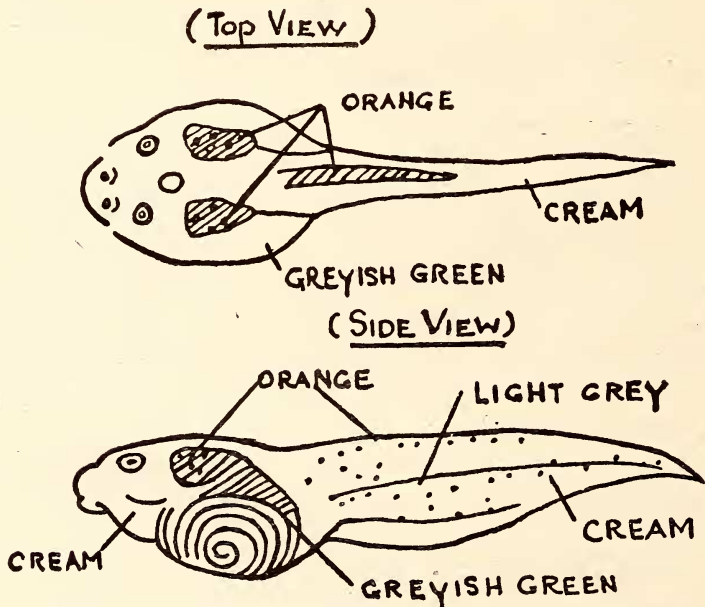
8. **Rana curtipes** Jerdon :

On the way to Talewadi, adults were obtained on the road near a stream and in a dry river bed. The adults are sluggish in their movements. In May 1953, they were found to be numerous under dry leaves on damp soil along a stream at Anmode near Castle Rock.

They are uncomfortable in water and, if driven or thrown in, immediately swim ashore.

Soman obtained tadpoles with fore and hind legs in a stream of running water on the western slopes of the Ghats beyond Talewadi. They did not keep together in a shoal. The dentition agrees with the description of the tadpoles of this species by Rao (*Rec. Indian Mus.* 10 : 265-266) but in colour the present series is all black and not 'uniformly dark with a few darker spots above, and dirty white below'.

During Xmas 1951, I obtained some tadpoles (see text-figure) at Dandeli which swam in compact shoals. As the dentition agreed with Rao's description, I have considered them as of this species. They however had a prominent orange-red paratoid gland on the back.



Sketch of Tadpole collected at Dandeli

Rao specifically stated that the tadpoles described by him had no paratoid glands which in Soman's specimens are visible, though smaller than and not brightly-coloured as those referred to above.

Mr. V. K. Chari in his description of the tadpoles of *Rana malabarica* (*J. Bombay nat. Hist. Soc.* 59 : 71-76) refers to tadpoles, also from Talewadi, in the collections of the Zoological Survey of India (ZSI No. 18270) which were originally said to be of *Rana malabarica*. The dentition in these tadpoles agrees with that for

curtipes, and the colour is also said to be dark, though no reference is made to the presence or absence of the paratoid glands.

The colour of the tadpoles, the size and colour of their paratoid glands, as well as their habit of swimming together or apart, may change with age or development, but it is possible that the tadpoles referred to above are of more than one species.

9. *Rana temporalis* (Gunth.) :

Were observed at Mahableshwar on the way back (23 May). Further to my observations in the *Journal* (52 : 636-637), I noted them as very common during the day at the Dhobi's Waterfall at Mahableshwar on 21-25 October 1955. Few attempts were made at calling and they were also very tame and could be easily caught. One was timed sitting under water for 12 minutes. A large, almost black female was 82 mm. long. Her stomach contained 2 small frogs and a pebble 12 mm. × 9 mm. (11 a.m.). Another male had eaten a *R. limnocharis*. An earlier note states that when calling, a yellowish patch shows at the throat.

10. *Nyctibatrachus humayuni* Bhaduri & Kirpalani :

Seen at Mahableshwar. A male obtained on Fitzgerald Ghat (21-25 October 1955) had orange patches under the thighs (cf. yellow in female, *J. Bombay nat. Hist. Soc.* 52 : 859) but the testes were not enlarged. Its stomach as well as that of another individual (both taken at about 9 p.m.) was packed with Neuropterous insects.

11. *Philautus leucorhinus* (Lichten. & Martens) :

This species was very common in the forest near Shirolī. Attention was first drawn to them at sunset when they started calling, all perched on trees between 4 and 5 ft. from the ground, and facing downwards at an angle of 45° from the vertical. On 2 June 1953, I took one specimen among the stones on the bank of a stream near Castle Rock. The call has been recorded and may be syllabilised thus : a loud *trēēk* uttered every four seconds, some of the calls being slightly prolonged, *trēē-ek*, and almost disyllabic; at irregular intervals the same individuals (?) produced a drumming noise, *kuk* being rapidly repeated four to five times.

12. *Ixalus* sp. :

One taken at Talewadi does not agree with any of the specimens available for comparison.

13. *Kaloula pulchra taprobanica* Parker :

As we drove out of Dandeli at about 2-30 p.m., it was drizzling

slightly and attention was drawn to two loud calls emanating from roadside pits which now contained water. One was traced to this species which was larger and more numerous than *Ramanella montana* (Jerdon) which was responsible for the other. The call was uttered invariably from near the shore, but seated in water with usually only the head and chin showing above water. The species was sluggish in its movements. Several were seen in copula in the water, the grip being axillary.

14. *Ramanella montana* (Jerdon):

Though smaller, its call was deeper than that of *Kaloula pulchra*, and always uttered from the shore or seated on a floating stick, outside water.

15. *Uperodon globulosum* (Gunth.):

On the night of the 20 May, it was raining heavily at Khanapur, and a loud call immediately outside the house was traced to this species. A further examination revealed it calling all over the neighbourhood. The rain-water gutter along the railway station held several individuals, calling while floating at an angle of 45° with their snouts touching the vertical side. They were also seen in shallow standing water where individuals floated on their bellies when they could have settled at the bottom. The shape and bulk of the species perhaps makes it easier for them to float than to sit.

They appeared to be common and also widely scattered over the area—quite unlike the earlier records of this species which have been extremely localised and restricted. The present record forms an extension of the recorded distribution, the nearest locality so far having been Bombay (*J. Bombay nat. Hist. Soc.* 52 : 637-639).

It will be recalled that they were first discovered at the same time in 1954 at the Kanheri Caves and at Thana. In subsequent years, it was seen again at Kanheri but not at Thana.

On 16 June 1957, a cistern at the Caves was dry and contained no water, but one corner held an unrecognisable lump and the other what appeared to be a large *Rana tigerina*. Pebbles thrown at the first failed to move it, but as it appeared to be some organic matter, I descended into the 5 ft. rock-bound tank and found it to be a female *Uperodon*. The large 'bull frog' was found to be a mass of 1 bull frog, 11 *Rana breviceps* (7 females and 4 males), and 4 male *Uperodons*. A pair of each species was taken and the female *Uperodon* was found to contain large masses of eggs which showed as a white mass with many black specks therein. Under the micro-

scope the eggs were seen to be round, half-white and half-black. The place was re-visited on the night of 22 June; the cistern contained 2 feet of water but, except for the 2 very large *tigerinas* and 1 water-snake (*Natrix piscator*), there was no trace of the 9 *breviceps* and 3 male *Uperodons*.

A loud grunt-like 'oink' led me to a near-by cave outside which a male was calling seated on the wet stone floor. Another was calling similarly about 15 yards away. When uttering the call, the black chin was inflated and a much larger grey bag appeared below. In the torchlight, a larger female was seen approaching him with long strides, not hops. Unfortunately, the first male which had been picked up was dropped near the second and, though the latter called again, something appeared to have gone wrong and there was no activity for 10 minutes, all three remaining in the same position a few inches apart.

No regular notes and/or observations were retained at Kanheri over subsequent years, but it does appear fairly certain, as is also supported by the evidence from Thana, that this species does not breed successfully every year and this, together with its strictly nocturnal habits, may account for the fact that so few persons have seen and/or recorded it.

ACKNOWLEDGEMENTS

Young Imran Tyabji, on holiday from Shri Shivaji Preparatory Military School at Poona, accompanied us and took a lively part in our activities. It is hoped that the interest he showed in Natural History will continue and develop. As mentioned above, P. W. Soman was actively associated with the collection of specimens, and M. J. Pereira was helpful in many ways. Mr. J. C. Daniel, Curator, Bombay Natural History Society, has assisted in the identification of the specimens. I also record my indebtedness to Mon. A Brosset for having given me the opportunity of making the trip, and to the Forest Department, Government of Mysore, particularly to Shri G. B. Narvekar, Range Forest Officer at Khanapur, without whose active collaboration in several ways we would have been unable to reach Talewadi.